

- a) it is decided that the fluorescence events observed are due to characteristics of the catalytic complex if the sequence of fluorescence events is a memory driven sequence of events and
- b) it is decided that the fluorescence events observed are due to contaminating nucleotides or other background signals, if the sequence of fluorescence events is not a memory driven sequence of events.

10. (Amended) Method according to claim 8, characterized in that the catalyst is selected from biomolecules, e.g. enzymes, inorganic molecules and organic molecules.

11. (Amended) Method according to claim 5 wherein an oscillating process is analyzed.